

ON SPONTANEOUS CURE OF THORACIC  
ANEURYSM.

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Sir Thomas Oliver recorded an interesting case of spontaneous cure of thoracic aneurysm in THE LANCET of April 3rd, 1909, p. 971, and expressed the view that the publication of such a case was important, because some pathologists have even denied that a thoracic aneurysm can be cured at all. That cure is not only possible, but may be spontaneous as in his case, I should like to testify to by recording another instance of such a result.

On Jan. 18th, 1907, I performed a necropsy upon a woman, aged 74 years, who came under observation nine hours before her death suffering from acute dyspnœa, associated with râles and rhonchi all over both lungs, and yet with so little available history that a precise diagnosis could not be made. She died in the early hours of the morning, apparently from acute œdema of the lungs, and at the post-mortem examination it was found that she had typical granular kidneys, adherent pericardium, and a healed thoracic aneurysm. It is difficult to say for certain whether the aneurysm itself accelerated death, but had there been no aneurysm at all one would have been content, from the post-mortem appearances, to diagnose acute œdema of the lungs the result of atrophic red granular kidneys.

The patient was a thin old woman, quite free from any anasarca. Her rib and laryngeal cartilages were calcified. There was no pleurisy, but there was fibrous scarring at the apices of the upper lobes of the lungs, clearly from healed phthisis, and there were adhesions between the anterior margins of each upper lobe and the aortic aneurysm described below. There was no free fluid in the pleural cavities; both lungs were small, not obviously emphysematous, but extremely œdematous throughout. The heart, though not obviously dilated, was covered by a universally adherent pericardium. The weight of the organ empty was

252 grammes. There was no available history as to when or why she had had pericarditis. The coronary arteries were moderately atheromatous and tortuous, but they were quite pervious. The muscle of the heart showed some brown pigment degeneration, and there was some interstitial fibrosis. There was no acute dilatation of any of the cavities of the heart. Judging from the thin condition of the body the organ would have weighed less than 252 grammes had there not been some hypertrophy of the left ventricle. The tricuspid, pulmonary, and mitral valves were natural for the patient's age. The aortic valves were but slightly atheromatous, and neither stenosed nor incompetent. Immediately above them, however, the aorta became extremely atheromatous, with such extensive calcification of the deeper layers of the tunica intima that the whole of the thoracic and abdominal aorta felt as if coated by egg-shell, the tube being rigid and calcareous to a very marked degree. In addition it was greatly thickened and much dilated, especially in the arch, which was distended into what was equivalent to a fusiform aneurysm. The distance between the aortic valves and the orifice of the innominate artery was stretched and lengthened so as to measure six inches, and in the middle of this, on the right side three inches above the aortic valves, was a brown opening less in diameter than a sixpenny-piece, with calcareous edges, through which the finger-tip could just be inserted, to come into immediate contact with a hard material which was found to be the firm, laminated, and extensively organised contents of a saccular aneurysm, which looked nearly the size of a tennis ball and was spherical and approximately three inches in diameter. This aneurysm, except quite close to its aortic orifice as described above, was entirely filled with hard, laminated, fibrosed clot, which was everywhere adherent to the wall of the sac and so hard that it could not be broken down by the fingers; nor could the fingers be pushed between it and the wall of the aneurysm. As has been said already, the contents of the sac came right up to the level of the wall of the aorta, so that the aneurysm could truly be said to have been spontaneously healed. The note made in the report at the time was: "This condition, is, I think, comparatively rare. The specimen was therefore sent to the Museum." It is in the Museum now. The aneurysmal sac was partly within and partly outside the pericardium, and it was adherent to both pleuræ, more especially the right. It did not obstruct either the right or the left bronchus, the main pulmonary artery, nor the left pulmonary

artery. Lying as it did immediately in front of the right pulmonary artery, however, it projected into the lumen of the latter, partly, but not completely, obstructing it by causing its lumen to be crescentic on cross section instead of circular. The accompanying diagrams (Figs. 1 and 2) may serve to indicate how this occurred.

The liver weighed 1220 grammes, it was not cirrhotic, and exhibited no evidence of syphilis. It was small and of normal

FIG. 1.

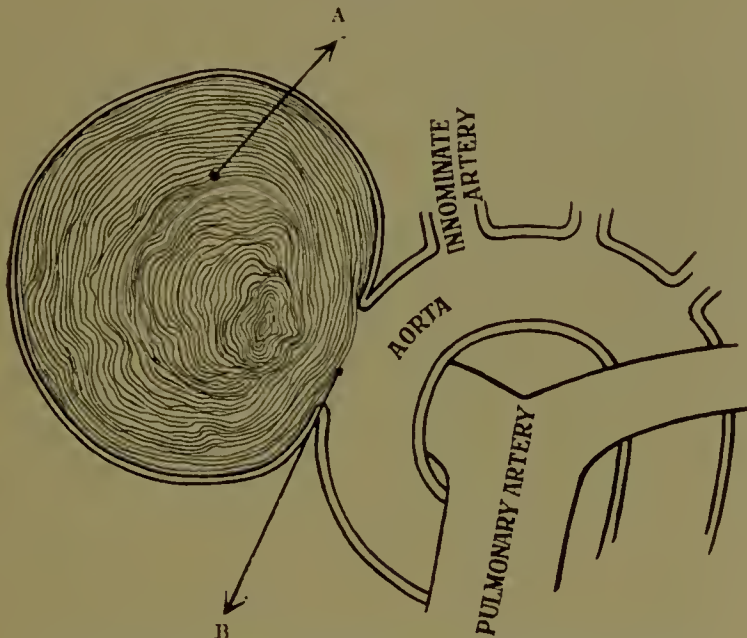


Diagram to indicate site and appearance of aneurysm, healed.  
 A, Sac of aneurysm quite obliterated by firm old organising clot. B, Opening into saccular aneurysm closed by firm organising clot.

colour and consistence. The spleen weighed 156 grammes. It was adherent to the diaphragm as the result of former capsulitis. The two kidneys weighed 180 grammes together. They were symmetrical typically granular organs, of dull-red colour, with thick capsules, peeling with difficulty, and leaving a rough nodular surface containing several retention cysts. The cortex was diminished to about one-third its natural width. The medulla was less atrophied than was the

cortex. The line of demarcation between the cortex and medulla was well defined. The pelves of the kidneys were neither dilated nor inflamed; the renal arterioles were prominent, with thick walls.

I think death in this case occurred, as I have said above, from acute œdema of the lungs, the result of chronic interstitial nephritis, and judging from the post-mortem appearances I think the thoracic aneurysm was of secondary importance as a cause of death. Whether this was so or not

FIG. 2.

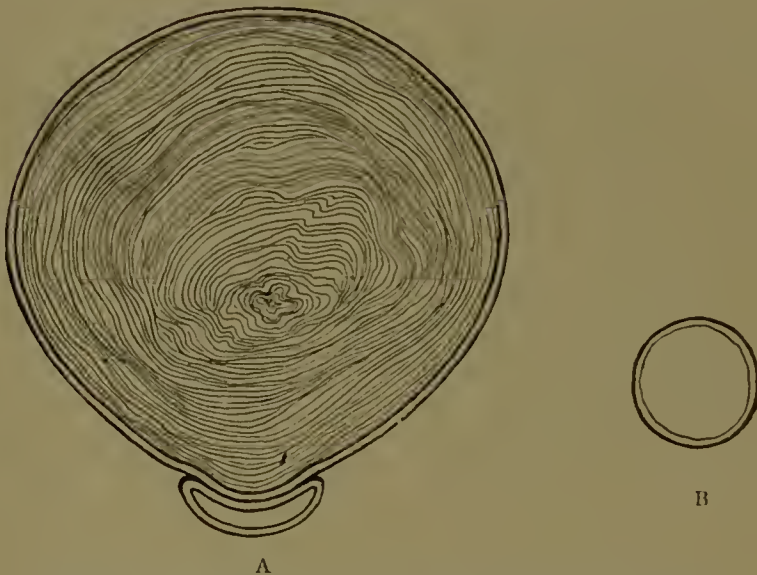


Diagram to illustrate effect of healed aneurysm of aorta on right pulmonary artery. A, Right branch of pulmonary artery distorted into crescentic shape on section, owing to compression by healed aortic aneurysm. B, Left branch of pulmonary artery, natural circular outline on section.

I feel sure that the case affords considerable support to Sir Thomas Oliver's contention that an aneurysm of the arch of the thoracic aorta, within a few inches of the aortic valves, is spontaneously curable. If this can occur spontaneously one need not be absolutely hopeless of being able to assist the cure of an aneurysm by careful treatment.